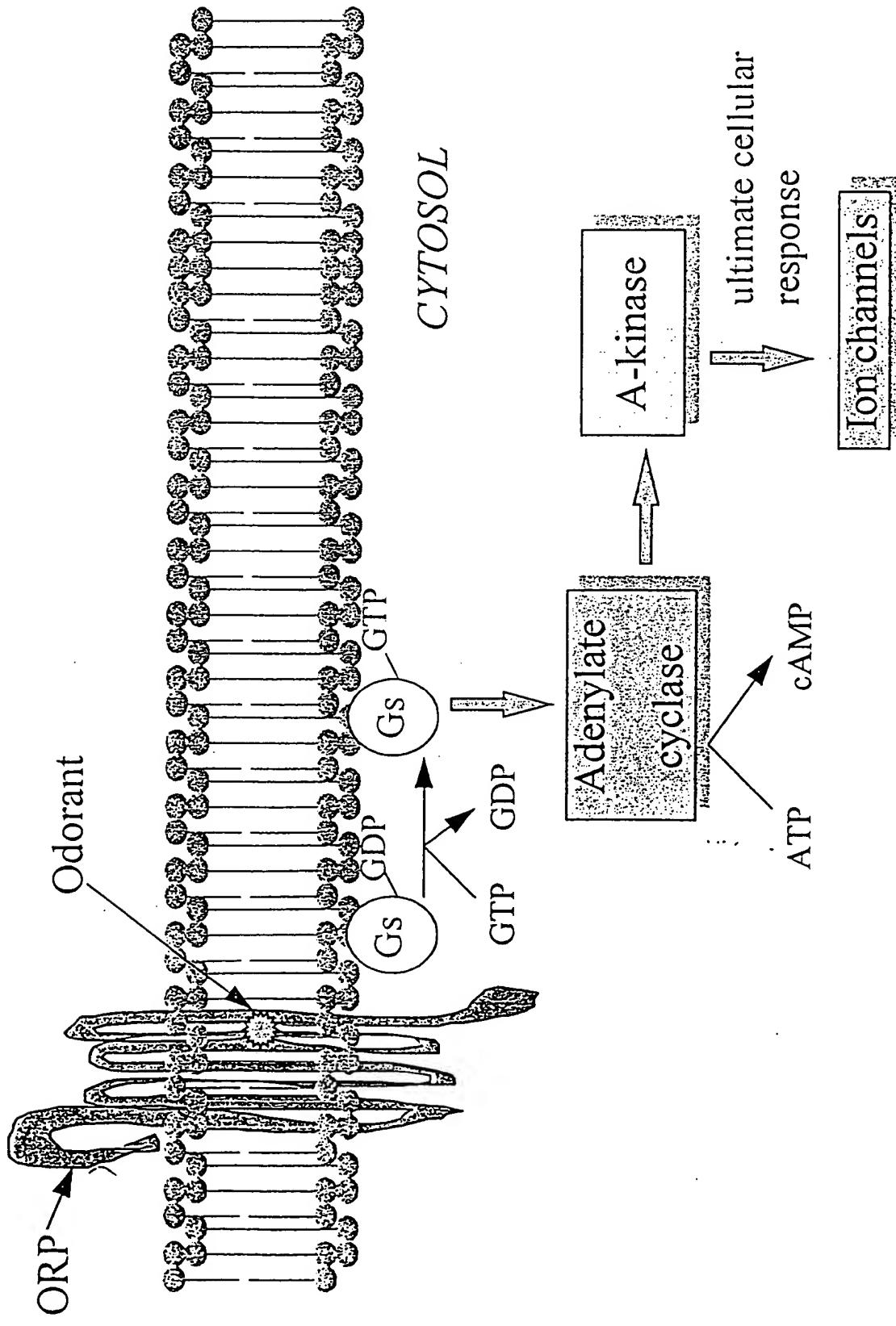


GDP GTP

The major pathway of olfactory transduction



F, G, 2D "Hi-Tech" SS

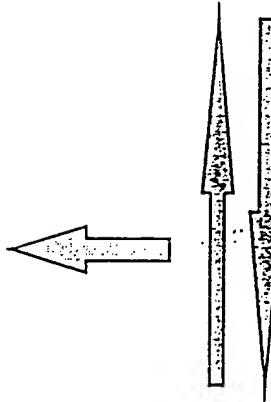
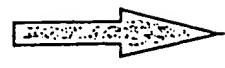
Search protein sequence
(1⁰ Structure)



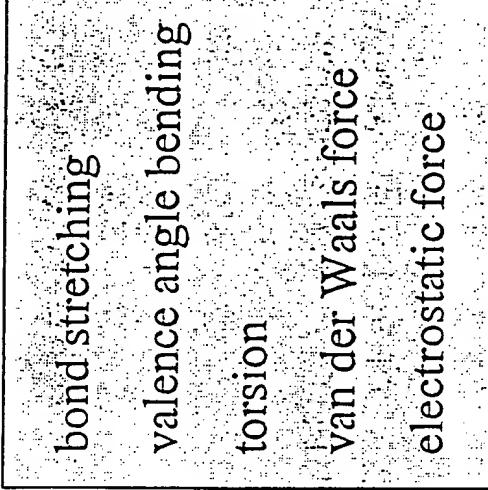
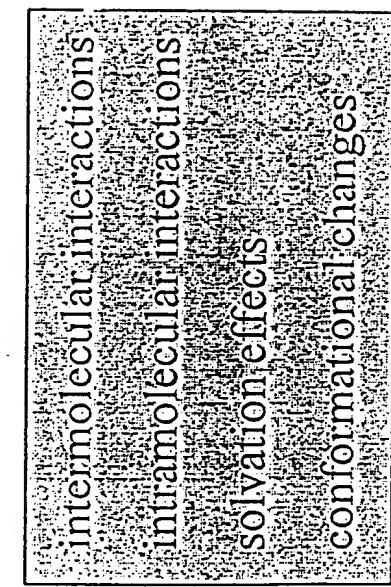
Establish 2⁰ structure

3⁰ structure modeling with
template

GRAMM (geometric fit)



Substrate (gas)



000000000000000000000000

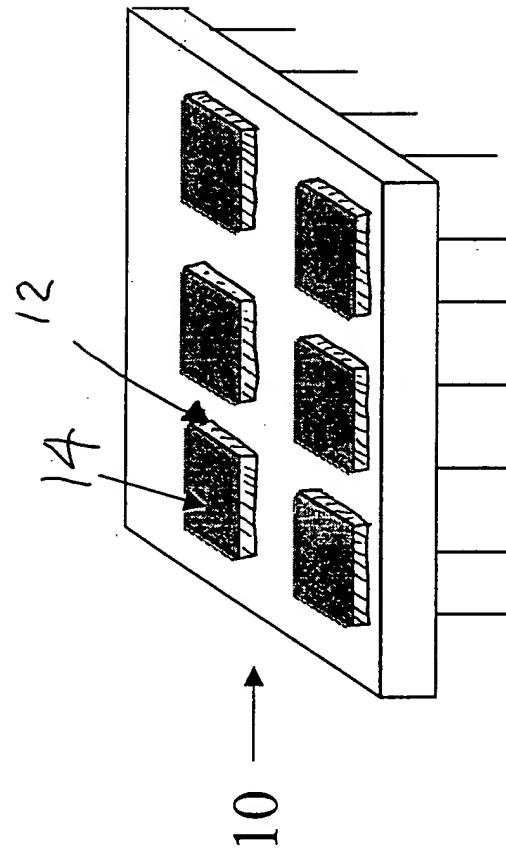


FIG 3

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Odorant/Olfactory Receptor Sequence of *Canis familiaris*: (SWISS-PROT:P30955)

MTEKNQTVVS EFVLLGLPID PDQRDLFYAL FLAMYVTTIL GNLLIIVLIQ LDSHLK~~PM~~
LFLSNLSFSD LCFSSVTMPK LLQNMQSQVP SIPYAGCLTQ MYFFLFFGDL ESFLLVAMAY
DRYVAICFPL HYTTIMSPKL CFSSLVLSSW LTMFHAVLHT LIMARLCFCA NTIPHFFCDN
SALLKACSD TQVNELVIFI MGGLILVIPF LLIITSYARI VSSILKVPSA IGIICKVFSTC
GSHLSVVSLF YGTVIGLYLC PSANNSTVKE TIMAMM~~MY~~TVV TPMLNPFIYS LRNKDMKGAI
RRVICRKKIT FSV

Amino acids: 330
Molecular weight: 35197 dalton

SOURCE:

G protein Coupled Receptor DataBase (GPCRDB)
(<http://receptor.Mgh.Harvard.Edu/GCRDBHOME.Html>)

FIG 5

Gas of detected	Peptides	
	B1	Pb2
Trimethylamine (5.86ppm)	5696	221
Dimethylamine (3.78ppm)	3851	589
Ammonia (4.86ppm)	1022	345
Acetone (7.21ppm)	13	31
Formic acid (1.33ppm)	161	97
Ethanol (4.68ppm)	-5	16
Formaldehyde (6.54ppm)	-25	19

Peptide sequence of B1:DPDQRDC

Peptide sequence of Pb2: LFLSNLSFSDLCA